

the eye side of the optical lens and a desired colour on the other side of the optical lens;
 and

wherein the asymmetric reflectance, light absorbing coating includes alternative layers of a dielectric material and a metallic material which is a metal or metal nitride.

46. An optical lens according Claim 45, wherein

the dielectric material is selected from one or more of Al_2O_3 , BaTiO_3 , Bi_2O_3 , B_2O_3 , CeO_2 , Cr_2O_3 , Ga_2O_3 , GeO_2 , Fe_2O_3 , HfO_2 , In_2O_3 , Indium-tin oxide, La_2O_3 , MgO , Nd_2O_3 , Nb_2O_5 , Pr_2O_3 , Sb_2O_3 , Sc_2O_3 , SiO , SiO_2 , SnO_2 , Ta_2O_5 , TiO , TiO_2 , Ti_2O_3 , Ti_3O_5 , WO_3 , Y_2O_3 , Yb_2O_3 , ZnO , ZrO_2 ; AlF_3 , BaF_2 , CaF_2 , CdF_2 , CeF_3 , HfF_4 , LaF_3 , LiF , MgF_2 , NaF , Na_3AlF_6 , $\text{Na}_5\text{Al}_3\text{F}_{14}$, NdF_3 , PbF_2 , PrF_3 , SrF_2 , ThF_4 , ZrF_4 ; Si_3N_4 , AlN , or diamond-like carbon, and

the metallic material is selected from the metals, or metal nitrides of one or more of Silver (Ag), Aluminium (Al), Gold (Au), Barium (Ba), Boron (B), Cadmium (Cd), Cerium (Ce), Cobalt (Co), Chromium (Cr), Copper (Cu), Iron (Fe), Germanium (Ge), Hafnium (Hf), Indium (In), Iridium (Ir), Potassium (K), Lanthanum (La), Magnesium (Mg), Manganese (Mn), Molybdenum (Mo), Nickel (Ni), Neodymium (Nd), Niobium (Nb), Lead (Pb), Palladium (Pd), Platinum (Pt), Rhenium (Re), Antimony (Sb), Selenium (Se), Silicon (Si), Tin (Sn), Strontium (Sr), Tantalum (Ta), Titanium (Ti), Tellurium (Te), Thallium (Tl), Vanadium (V), Tungsten (W), Zinc (Zn) or Zirconium (Zr).

47. An optical lens according to Claim 45, wherein the asymmetric reflectance, light absorbing coating further includes a compatible dielectric top layer or layers.

48. An optical lens according to Claim 47, wherein the compatible dielectric layer or layers are of suitable material and thickness to provide a desired colour to the optical lens.

49. An optical lens including
a lens element; and
an asymmetric reflectance, light absorbing coating including at least four alternating layers of Silica (SiO₂) and Chromium (Cr), Niobium (Nb) or Zirconium (Zr) metal; and wherein the thickness and/or number of the respective layers are selected to provide an anti-reflective effect on the eye side of the optical lens and a desired colour on the other side of the optical lens.

50. An optical lens according to Claim 49, wherein the asymmetric reflectance, light absorbing coating includes an additional dielectric layer or layers other than silica of such a thickness to provide a desired colour to the optical lens.

51. An optical lens according to Claim 49, wherein the asymmetric reflectance, light absorbing coating includes alternating layers of silica and niobium metal and an

additional niobium oxide (Nb_2O_5) and/or silica (SiO_2) layer of such thicknesses to provide a desired colour to the optical lens.

52. An optical lens according to Claim 45, wherein a surface of the lens is subjected to a surface treatment.

53. An optical lens according to Claim 52, wherein the surface treatment improves adhesion thereto.

54. An optical lens according to Claim 53, wherein a surface is subjected to a plasma treatment.

55. An optical lens according to Claim 53, wherein an adhesion promoting coating is applied to a surface.

56. An optical lens according to Claim 45, wherein a surface of the lens element bears a mark thereon, the mark being visible from the front surface of the optical lens, but not being visible from the eyeside thereof.

57. An optical lens according to Claim 56, wherein the asymmetric reflectance, light absorbing coating is deposited on the surface bearing the mark, to render the mark substantially invisible from the eyeside of the lens.

58. An optical lens according to Claim 45, wherein the lens element is a laminate optical lens.

59. A multi-coated optical lens including
a lens element;
an asymmetric reflectance, light absorbing coating including a plurality of overlapping light absorbing and generally transparent layers, and wherein the thickness and/or number of the respective layers are selected to provide an anti-reflective effect on the eye side of the optical lens and a desired colour on the other side of the lens;
wherein the asymmetric reflectance, light absorbing coating includes alternating layers of a dielectric material and a metallic material which is a metal or metal nitride;
a secondary coating which provides a desirable optical and/or mechanical property to the optical lens.

60. A multi-coated optical lens according to Claim 59, wherein the dielectric material is selected from one or more of Al_2O_3 , BaTiO_3 , Bi_2O_3 , B_2O_3 , CeO_2 , Cr_2O_3 , Ga_2O_3 , GeO_2 , Fe_2O_3 , HfO_2 , In_2O_3 , Indium-tin oxide, La_2O_3 , MgO , Nd_2O_3 , Nb_2O_5 , Pr_2O_3 , Sb_2O_3 ,

Sc₂O₃, SiO, SiO₂, SnO₂, Ta₂O₅, TiO, TiO₂, Ti₂O₃, Ti₃O₅, WO₃, Y₂O₃, Yb₂O₃, ZnO, ZrO₂;
 AlF₃, BaF₂, CaF₂, CdF₂, CeF₃, HfF₄, LaF₃, LiF, MgF₂, NaF, Na₃AlF₆, Na₅Al₃Fl₁₄, NdF₃,
 PbF₂, PrF₃, SrF₂, ThF₄, ZrF₄; Si₃N₄, AlN, or diamond-like carbon; and

the metallic material is selected from the metals, or metal nitrides of one or more of
 Silver (Ag), Aluminium (Al), Gold (Au), Barium (Ba), Boron (B), Cadmium (Cd), Cerium
 (Ce), Cobalt (Co), Chromium (Cr), Copper (Cu), Iron (Fe), Germanium (Ge), Hafnium
 (Hf), Indium (In), Iridium (Ir), Potassium (K), Lanthanum (La), Magnesium (Mg),
 Manganese (Mn), Molybdenum (Mo), Nickel (Ni), Neodymium (Nd), Niobium (Nb), Lead
 (Pb), Palladium (Pd), Platinum (Pt), Rhenium (Re), Antimony (Sb), Selenium (Se), Silicon
 (Si), Tin (Sn), Strontium (Sr), Tantalum (Ta), Titanium (Ti), Tellurium (Te), Thallium
 (Tl), Vanadium (V), Tungsten (W), Zinc (Zn) or Zirconium (Zr).

61. A multi-coated optical lens according to Claim 59, wherein the asymmetric
 reflectance, light absorbing coating further includes a compatible dielectric top layer or
 layers.

62. A multi-coated optical lens according to Claim 61, wherein the compatible
 dielectric layer or layers are of suitable material and thickness to provide a desired colour
 to the optical lens.

63. A multi-coated lens according to Claim 59, wherein the secondary coating is an abrasion-resistant or hydrophobic coating applied to the front surface or eye side surface of the optical lens.

64. A multi-coated optical lens according to Claim 59, wherein the secondary coating is an anti-reflective coating applied to the front surface or eye side surface of the optical lens.

65. A multi-coated optical lens according to Claim 64, further including an abrasion-resistant coating supporting the anti-reflective coating.

66. A multi-coated optical lens according to Claim 65, wherein the abrasion-resistant coating includes an organo-silicone resin.

67. An optical lens element including
a lens wafer having
a first lens surface; and
a second lens surface,
the first or second surface having deposited thereon
an asymmetric reflectance, light absorbing coating including at least four
overlapping light absorbing and generally transparent layers, and wherein the thickness

and/or number of the respective layers are selected to provide an anti-reflective effect on the eye side of the optical lens and a desired colour on the other side of the optical lens when formed as a laminate optical lens; and

wherein the asymmetric reflectance, light absorbing coating includes alternating layers of a dielectric material and a metallic material which is a metal or metal nitride.

68. An optical lens element according to Claim 67 wherein

the dielectric material is selected from one or more of Al_2O_3 , BaTiO_3 , Bi_2O_3 , B_2O_3 , CeO_2 , Cr_2O_3 , Ga_2O_3 , GeO_2 , Fe_2O_3 , HfO_2 , In_2O_3 , Indium-tin oxide, La_2O_3 , MgO , Nd_2O_3 , Nb_2O_5 , Pr_2O_3 , Sb_2O_3 , Sc_2O_3 , SiO , SiO_2 , SnO_2 , Ta_2O_5 , TiO , TiO_2 , Ti_2O_3 , Ti_3O_5 , WO_3 , Y_2O_3 , Yb_2O_3 , ZnO , ZrO_2 ; AlF_3 , BaF_2 , CaF_2 , CdF_2 , CeF_3 , HfF_4 , LaF_3 , LiF , MgF_2 , NaF , Na_3AlF_6 , $\text{Na}_5\text{Al}_3\text{F}_{14}$, NdF_3 , PbF_2 , PrF_3 , SrF_2 , ThF_4 , ZrF_4 ; Si_3N_4 , AlN , or diamond-like carbon; and

the metallic material is selected from the metals, or metal nitrides of one or more of Silver (Ag), Aluminium (Al), Gold (Au), Barium (Ba), Boron (B), Cadmium (Cd), Cerium (Ce), Cobalt (Co), Chromium (Cr), Copper (Cu), Iron (Fe), Germanium (Ge), Hafnium (Hf), Indium (In), Iridium (Ir), Potassium (K), Lanthanum (La), Magnesium (Mg), Manganese (Mn), Molybdenum (Mo), Nickel (Ni), Neodymium (Nd), Niobium (Nb), Lead (Pb), Palladium (Pd), Platinum (Pt), Rhenium (Re), Antimony (Sb), Selenium (Se), Silicon (Si), Tin (Sn), Strontium (Sr), Tantalum (Ta), Titanium (Ti), Tellurium (Te), Thallium (Tl), Vanadium (V), Tungsten (W), Zinc (Zn) or Zirconium (Zr).

69. An optical lens element according to Claim 67, wherein the lens wafer is a front lens wafer and the asymmetric reflectance light absorbing coating is deposited on the concave contact surface of the front lens wafer.

70. An optical lens element according to Claim 67 wherein the lens wafer is a back lens wafer and the asymmetric reflectance light absorbing coating is deposited on the convex contact surface of the back lens wafer.

71. An optical lens element according to Claim 67, wherein the lens wafer is a back lens wafer and the asymmetric reflectance light absorbing coating is deposited on the concave surface of the back lens wafer.

72. An optical lens element according to Claim 67, wherein the lens wafer is a front lens wafer and the asymmetric reflectance light absorbing coating is deposited on the convex surface of the front lens wafer.

73. An optical lens element according to Claim 67, wherein a surface of the lens wafer includes a roughened area on the surface to form a mark and the asymmetric reflectance light absorbing coating is deposited on the roughened surface.

74. A laminate optical lens including

a front lens wafer including

a contact surface;

a complementary back lens wafer including

a contact surface; and

an asymmetric reflectance, light absorbing coating deposited on a contact surface, which light absorbing coating includes at least four overlapping light absorbing and generally transparent layers, and wherein the thickness and/or number of the respective layers are selected to provide an anti-reflective effect on the eye side of the optical lens and a desired colour on the other side of the optical lens; and

wherein the asymmetric reflectance, light absorbing coating includes alternating layers of a dielectric material and a metallic material which is a metal or metal nitride.

75. A laminate optical lens according to Claim 74, wherein

the dielectric material is selected from one or more of Al_2O_3 , BaTiO_3 , Bi_2O_3 , B_2O_3 , CeO_2 , Cr_2O_3 , Ga_2O_3 , GeO_2 , Fe_2O_3 , HfO_2 , In_2O_3 , Indium-tin oxide, La_2O_3 , MgO , Nd_2O_3 , Nb_2O_5 , Pr_2O_3 , Sb_2O_3 , Sc_2O_3 , SiO , SiO_2 , SnO_2 , Ta_2O_5 , TiO , TiO_2 , Ti_2O_3 , Ti_3O_5 , WO_3 , Y_2O_3 , Yb_2O_3 , ZnO , ZrO_2 ; AlF_3 , BaF_2 , CaF_2 , CdF_2 , CeF_3 , HfF_4 , LaF_3 , LiF , MgF_2 , NaF , Na_3AlF_6 , $\text{Na}_5\text{Al}_3\text{F}_{14}$, NdF_3 , PbF_2 , PrF_3 , SrF_2 , ThF_4 , ZrF_4 ; Si_3N_4 , AlN , or diamond-like carbon; and

the metallic material is selected from the metals, or metal nitrides of one or more of Silver (Ag), Aluminium (Al), Gold (Au), Barium (Ba), Boron (B), Cadmium (Cd), Cerium

(Ce), Cobalt (Co), Chromium (Cr), Copper (Cu), Iron (Fe), Germanium (Ge), Hafnium (Hf), Indium (In), Iridium (Ir), Potassium (K), Lanthanum (La), Magnesium (Mg), Manganese (Mn), Molybdenum (Mo), Nickel (Ni), Neodymium (Nd), Niobium (Nb), Lead (Pb), Palladium (Pd), Platinum (Pt), Rhenium (Re), Antimony (Sb), Selenium (Se), Silicon (Si), Tin (Sn), Strontium (Sr), Tantalum (Ta), Titanium (Ti), Tellurium (Te), Thallium (Tl), Vanadium (V), Tungsten (W), Zinc (Zn) or Zirconium (Zr).

76. A laminate optical lens according to Claim 74, wherein a contact surface of the front and/or back lens wafer bears a visible mark thereon, the mark being rendered substantially invisible from the eye side of the laminate lens when the lens wafer is bonded to its complementary wafer with a laminate adhesive having a refractive index approximately equal to that of the optical lens.

77. A laminate optical lens according to Claim 76, wherein the mark is visible from the front surface of the laminate lens.

78. A laminate optical lens according to Claim 76, wherein the mark is a roughened area on the surface of the contact surface and the asymmetric reflectance light absorbing coating is deposited on the roughened contact surface.

79. A laminate optical lens according to Claim 76, wherein the asymmetric reflectance light absorbing coating includes a silica top layer, the silica top layer bearing a mark visible prior to lamination of the wafers.

80. A laminate optical lens according to Claim 79 wherein the visible mark is etched into the silica top layer.

81. A laminate optical lens according to Claim 79 wherein the visible mark is deposited on the silica top layer, the visible mark being formed from a laminate adhesive or polymeric material having a refractive index approximately equal to that of the silica layer.

82. A laminate optical lens according to Claim 74, wherein the laminated optical lens is of the semi-finished type.

83. A method for preparing an optical lens, including
a lens element; and
an asymmetric reflectance, light absorbing coating including at least four overlapping light absorbing and generally transparent layers, and wherein the thickness and/or number of the respective layers are selected to provide an anti-reflective effect on

the eye side of the optical lens and a desired colour on the other side of the optical lens;
 and

wherein the asymmetric reflectance, light absorbing coating includes alternating
 layers of a dielectric material and a metallic material which is a metal or metal nitride;

which method includes

providing

a lens element,

a dielectric material or materials; and

a metallic material or materials;

depositing at least four overlapping layers of dielectric material and metallic
 material on a surface of the optical lens element, the number and/or thickness of the
 respective layers being selected to provide an asymmetric reflectance, light absorbing
 coating.

84. A method according to Claim 83, wherein

the dielectric material is selected from one or more of Al_2O_3 , BaTiO_3 , Bi_2O_3 , B_2O_3 ,
 CeO_2 , Cr_2O_3 , Ga_2O_3 , GeO_2 , Fe_2O_3 , HfO_2 , In_2O_3 , Indium-tin oxide, La_2O_3 , MgO , Nd_2O_3 ,
 Nb_2O_5 , Pr_2O_3 , Sb_2O_3 , Sc_2O_3 , SiO , SiO_2 , SnO_2 , Ta_2O_5 , TiO , TiO_2 , Ti_2O_3 , Ti_3O_5 , WO_3 ,
 Y_2O_3 , Yb_2O_3 , ZnO , ZrO_2 ; AlF_3 , BaF_2 , CaF_2 , CdF_2 , CeF_3 , HfF_4 , LaF_3 , LiF , MgF_2 , NaF ,
 Na_3AlF_6 , $\text{Na}_5\text{Al}_3\text{F}_{14}$, NdF_3 , PbF_2 , PrF_3 , SrF_2 , ThF_4 , ZrF_4 ; Si_3N_4 , AlN , or diamond-like
 carbon; and

the metallic material is selected from the metals, or metal nitrides of one or more of Silver (Ag), Aluminium (Al), Gold (Au), Barium (Ba), Boron (B), Cadmium (Cd), Cerium (Ce), Cobalt (Co), Chromium (Cr), Copper (Cu), Iron (Fe), Germanium (Ge), Hafnium (Hf), Indium (In), Iridium (Ir), Potassium (K), Lanthanum (La), Magnesium (Mg), Manganese (Mn), Molybdenum (Mo), Nickel (Ni), Neodymium (Nd), Niobium (Nb), Lead (Pb), Palladium (Pd), Platinum (Pt), Rhenium (Re), Antimony (Sb), Selenium (Se), Silicon (Si), Tin (Sn), Strontium (Sr), Tantalum (Ta), Titanium (Ti), Tellurium (Te), Thallium (Tl), Vanadium (V), Tungsten (W), Zinc (Zn) or Zirconium (Zr).

85. A method according to Claim 83, wherein a surface of the optical lens bears a mark and the asymmetric reflectance light absorbing coating is deposited on the surface bearing the mark, such that the mark is visible from the front surface of the optical lens, but not being visible from the eyeside thereof.

86. A method according to Claim 83, wherein the deposition step is a vacuum deposition step and is conducted in a box coater or sputter coating apparatus.

87. A method according to Claim 83, wherein the lens element includes
a front lens wafer including
a contact surface,
a complementary back lens wafer, including

a contact surface

and the overlapping layers of dielectric material and metallic material are deposited on a surface of the front and/or complementary back lens wafer.

88. A method according to Claim 87, wherein the overlapping layers of dielectric material and metallic material are deposited on a contact surface of the front or complementary back lens wafer.

89. A method according to Claim 88, wherein a laminate adhesive is applied to one or both contact surfaces, the front lens wafer and back lens wafer being brought into contact and the laminate so formed being subjected to a curing step to form a laminate optical lens.

90. A method according to Claim 89, wherein the contact surface bearing the light absorbing coating bears a visible mark thereon; such that, when the laminate is bonded, the mark on the contact surface becomes substantially invisible to the wearer.

91. A method according to Claim 89, wherein the top layer of the light absorbing coating is a silica layer bearing a visible mark thereon;